

WIRELESS SUBSCRIBER NETWORK REGISTRATION  
SYSTEM FOR CONFIGURABLE SERVICES

ABSTRACT OF THE DISCLOSURE

In a wireless telecommunications network, wireless transmissions are carried via  
5 an RF medium between users and a central wireless transceiver, or base station  
processor. A subscriber access unit connected to a user device such as a user PC is  
employed to transmit wireless messages to and from the base station processor.  
Multiple, simultaneous wireless transmissions to the base station from different  
subscriber access units can have a tendency to interfere with each other. Subscriber  
10 access units employing an omnidirectional antenna or which are highly mobile will tend  
to experience more interference than stationary users or subscriber access units  
employing a directional antenna. The allocation of wireless transmission resources to  
retransmit wireless messages over a lossy link can have a detrimental effect on wireless  
resources available for other users. A system which allows a subscriber access unit to  
15 register device capabilities with a base station processor to determine the degree to  
which a particular subscriber access unit may be prone to interference provides  
computation and adjustment of transmission constraints for each subscriber access unit  
accordingly to maximize throughput.